



Native Plants

& EASTERN BOX TURTLES

The woods will soon begin to transform. As spring arrives, seemingly bare stretches of decomposing leaves will give way to new life, bits of color from ephemerals dappling the forest floor. Mayapples (*Podophyllum peltatum*) are among these early emerging species. They first appear stub-like, their closed leaves poking up from between the leaf litter and twigs on the ground. As the weather continues to warm, their stems grow taller and their two umbrella-like leaves unfurl. Because they spread by underground rhizomes, Mayapples often form colonies in areas of suitable habitat, but, as a woodland plant, spreading doesn't happen particularly quickly. According to the Virginia Native Plant Society, some large colonies of Mayapples can be up to 100 years old, and so, in the wild, this species also needs to rely on their seeds to spread populations farther away. How does this happen? In March-May, Mayapples' waxy white flowers bloom. These flowers are solitary and around 1½ to 2 inches wide, forming at the notch of the plants stems below the two leaves. After the flowers are pollinated, mainly by bees, yellow lemon-like fruit sets on the plant; these are an especially favored food source for Mayapples' primary seed disperser--Eastern Box Turtles!



When habitat conditions are stable, one Eastern Box Turtle can spend its life in an area not much larger than an acre, carrying the seeds of Mayapples throughout its territory and building more plant colonies. When the seeds go through the turtle's digestive system, their germination rate improves.



The digestion of the turtle reduces the thickness of the Mayapple seed's coat, aiding to its growing success. Since the relationship between Mayapples and Box Turtles is so close, changes in the populations of either affects both parties. In recent years, Eastern Box Turtle populations have declined, and when this happens, Mayapple populations also decrease. However, when ecosystems have healthy stands of Mayapples, Eastern Box Turtle populations are also likely to thrive.

↪ An Eastern Box Turtle digging a hole to lay eggs

Currently Eastern Box Turtles are listed in Virginia as a Tier III Species of Greatest Conservation Concern. Their decline is largely due to habitat loss, as well as other issues including roadway collisions, pesticide use, and capturing for the pet trade.



- WHAT DO TURTLES EAT? -

An Eastern Box Turtle's diet consists of mushrooms, slugs, earthworms, and especially berry-like seeds and fruits of native plants. The sweet red fruit of Wild Strawberries (*Fragaria virginiana*) ripens in summer and is especially preferred. Jack-in-the-Pulpit's (*Arisaema triphyllum*) scarlet berries are also used, as well as the native Pokeweed's. Fruit that drops from trees and shrubs is widely scavenged by turtles, including American Plum (*Prunus americana*), Black Cherry (*Prunus serotina*), Paw Paw (*Asimina triloba*), Spicebush (*Lindera benzoin*), and American Elderberry (*Sambucus canadensis*). All of these species are helped when Eastern Box Turtles feed on their fruit since, in return, the turtles help to disperse their seeds, carrying them to new locations.



- HOW CAN YOU HELP TURTLES & OTHER WILDLIFE-

Protecting naturally occurring native plants and adding habitat corridors of truly native species are the most effective ways to help all wildlife. Make sure to keep fallen leaves in place in your corridor. Their moisture-holding capacity is necessary for many types of wildlife, including turtles.

Lastly, if you see a turtle in the road, safely stop and help it across! Make sure to always place the turtle in

Turtle Food Plants

Include:

Top: Jack-in-the-Pulpit ;

**Middle: Black Cherry
(*Prunus serotina*);**

**Bottom: American
Elderberry (*Sambucus
canadensis*)**



the direction that it is heading.

Since Eastern Box Turtles are a naturally long-lived species, maturing at 5-7 years old, they are at a greater conservation risk. Some individuals reportedly have lived over 100 years.

